Figure: 30 TAC §307.10(5)

## **Appendix E - Site-specific Toxic Criteria**

The water bodies found in this appendix have a site-specific standard for the chemical parameter listed. The procedures for obtaining a site-specific standard are specified in §307.2(d) of this title (relating to Description of Standards) and result in a site-specific adjustment factor (such as a water-effect ratio (WER), multiplier, etc.). For most of the chemical parameters listed, this factor is used along with hardness in the formulas listed in Table 1 of §307.6(c)(1) of this title (relating to Toxic Materials) to calculate the dissolved portion of the parameter. The newly calculated criteria from Table 1 of §307.6(c)(1) of this title are then used to calculate discharge limits for permitted facilities. To calculate discharge limits, use the site-specific adjustment factors listed in this appendix in accordance with the most current Procedures to Implement the Texas Surface Water Quality Standards (RG-194) as amended. If a smaller portion of a water body has a separate and different site-specific adjustment factor, this factor supersedes any other factor specified for the larger water body that includes the smaller water body. In establishing Texas Pollutant Discharge Elimination System (TPDES) permit conditions, the site-specific criteria only apply to the referenced facility except where otherwise noted in footnote 3 of this Appendix.

SEGMENT	SITE DESCRIPTION	TPDES	FACILITY	PARAMETER	SITE-SPECIFIC ADJUSTMENT FACTOR	ADDITIONAL SITE- SPECIFIC CONSIDERATIONS
0301	Remnant channel of Baker Slough from the edge of the mixing zone in Segment 0301 upstream to the permitted outfall in Cass County	01339-000	International Paper Co.	Aluminum <sup>1, 4</sup>	6.39	
0303	River Crest Reservoir	00945-000	Luminant Generation Co.	Copper <sup>1, 3</sup>	3.4	
0403	Johnson Creek Reservoir in Marion County	01331-000	SWEPCO	Copper <sup>1, 3</sup>	5.15	Hardness = 20 mg/L TSS = 4 mg/L
0404	Welsh Reservoir in Titus County	01811-000	SWEPCO	Aluminum <sup>1, 3</sup>	10	
0404	Big Cypress Creek in Camp, Titus, and Morris counties	00348-000	Lone Star Steel	Lead <sup>2, 3</sup>	Acute Criterion = 38.3 µg/L Chronic Criterion = 5.3 µg/L	Hardness = 40.1 mg/L  Criteria listed in "Sitespecific Adjustment Factor" column includes a correction factor of 0.924152

SEGMENT	SITE DESCRIPTION	TPDES	FACILITY	PARAMETER	SITE-SPECIFIC ADJUSTMENT FACTOR	ADDITIONAL SITE- SPECIFIC CONSIDERATIONS
0404	Unnamed tributary of Hart Creek from the edge of the mixing zone in Hart Creek upstream to the permitted outfall in Titus County	10575-004	City of Mount Pleasant	Copper <sup>1, 4</sup>	7.16	
0409	Sugar Creek from the edge of the mixing zone in Segment 0409 upstream to the permitted outfall in Upshur County	10457-001	City of Gilmer	Copper <sup>1, 4</sup>	6.83	
0501	Sabine River Tidal in Orange County	00475-000	E.I. DuPont de Nemours	Copper <sup>1, 4</sup>	1.9	
0505	Sabine River from the confluence with Brandy Branch approximately 1 mi (1.6 km) upstream from Highway 43 in Harrison County upstream to SH 149 in Gregg County	00471-000	Eastman Chemical Co.	Copper <sup>1, 4</sup>	6.7	Hardness = 40 mg/L
0506	Mill Creek from CR 1106 upstream to the permitted outfall in Van Zandt County	10399-002	City of Canton	Copper <sup>1, 4</sup>	7.71	
0510	Mill Creek from the edge of the mixing zone in Segment 0510 upstream to the confluence with Adaway Creek in Rusk County	10187-002	City of Henderson	Copper <sup>1, 4</sup>	4.95	

SEGMENT	SITE DESCRIPTION	TPDES	FACILITY	PARAMETER	SITE-SPECIFIC ADJUSTMENT FACTOR	ADDITIONAL SITE- SPECIFIC CONSIDERATIONS
0511	Unnamed tidal drainage ditch from the edge of the mixing zone in Segment 0511 upstream to the permitted outfall in Orange County	00670-000	Honeywell, Inc.	Copper <sup>1, 4</sup>	2.39	
0511	Unnamed tidal drainage ditch from the edge of the mixing zone in Segment 0511 upstream to the permitted outfall in Orange County	00454-000	Firestone Polymers	Copper <sup>1, 4</sup>	2.54	
0601	The entirety of the mixing zone for permitted Outfall 001 within the Neches River Tidal	00462-000	ExxonMobil	Zinc <sup>1, 4</sup>	2.89	
0603	Sandy Creek from the edge of the mixing zone in Segment 0603 upstream to the permitted outfall in Jasper County	10197-001	City of Jasper	Copper <sup>1, 4</sup>	4.67	
0604	Unnamed tributary of Bear Creek from the edge of the zone of initial dilution in Bear Creek upstream to the permitted outfall in Polk County	01902-000	International Paper - Corrigan	Aluminum <sup>1, 4</sup>	5.58	

SEGMENT	SITE DESCRIPTION	TPDES	FACILITY	PARAMETER	SITE-SPECIFIC ADJUSTMENT FACTOR	ADDITIONAL SITE- SPECIFIC CONSIDERATIONS
0604	Buck Creek from the confluence with Clayton Creek upstream to the confluence with the unnamed tributary receiving the discharge from the permitted outfall in Angelina County	01268-000	Lufkin Industries	Copper <sup>1, 4</sup>	7.94	
0604	One-eye Creek from the edge of the mixing zone in Box Creek upstream to the permitted outfall in Cherokee County	10447-001	City of Rusk	Copper <sup>1, 4</sup>	4.3	Hardness = 40 mg/L
0611	Lake Stryker	00946-000	Luminant	Aluminum <sup>1, 3</sup>	3.7	
0611	Ragsdale Creek from the edge of the mixing zone in Keys Creek upstream to the permitted outfall in Cherokee County	10693-001	City of Jacksonville	Copper <sup>1, 4</sup>	4.6	Hardness = 48 mg/L
0615	Papermill Creek from the edge of the zone of initial dilution in Segment 0615 upstream to the permitted outfall in Angelina County	00368-000	Abitibi Consolidated	Aluminum <sup>1, 4</sup>	8.39	
0805	Forney Branch from the edge of the mixing zone in White Rock Creek upstream to the permitted outfall in Dallas County	01251-000	Luminant Generation Co.	Copper <sup>1, 4</sup>	3.9	
0806	West Fork Trinity River in Tarrant County	00555-000	Luminant Generation Co.	Copper <sup>1, 4</sup>	2.5	

SEGMENT	SITE DESCRIPTION	TPDES	FACILITY	PARAMETER	SITE-SPECIFIC ADJUSTMENT FACTOR	ADDITIONAL SITE- SPECIFIC CONSIDERATIONS
0823	Cantrell Slough from the edge of the mixing zone in Segment 0823 upstream to permitted Outfall 001 in Denton County	14323-001	UTRWD	Copper <sup>1, 4</sup>	6.43	
1001	San Jacinto River Tidal in Harris County	NA	NA	Copper <sup>1, 3</sup>	1.8	
1005	Houston Ship Channel/San Jacinto River Tidal in Harris County	NA	NA	Copper <sup>1, 3</sup>	1.8	
1005	Phillips Ditch and Santa Anna Bayou: Phillips Ditch from the edge of the mixing zone in Santa Anna Bayou upstream to permitted Outfall 001 in Harris County	01539-000	Oxy Vinyls	Nickel <sup>1, 4</sup>	1.13	
1005	The Houston Ship Channel/San Jacinto River tidal from the edge of the mixing zone in Segment 2421 upstream to the confluence with Santa Anna Bayou in Harris County	02097-000	Oxy Vinyls	Copper <sup>1, 4</sup>	1.8	
1005	Phillips Ditch from the edge of the MZ in Santa Anna Bayou upstream to permitted Outfall 001 in Harris County	04119-000	Akzo Nobel Chemical	Aluminum <sup>1, 4</sup>	3.93	

SEGMENT	SITE DESCRIPTION	TPDES	FACILITY	PARAMETER	SITE-SPECIFIC ADJUSTMENT FACTOR	ADDITIONAL SITE- SPECIFIC CONSIDERATIONS
1006	Houston Ship Channel Tidal in Harris County	NA	NA	Copper <sup>1, 3</sup>	1.8	
1006	Tucker Bayou from the edge of the mixing zone in Segment 1006 upstream to the permitted outfall in Harris County	01429-000	Safety-Kleen	Copper <sup>1, 4</sup>	2.3	
1006	Greens Bayou Tidal from the edge of the mixing zone in the Houston Ship Channel upstream to the confluence with Spring Gully in Harris County	01031-000	Texas Genco	Copper <sup>1, 4</sup>	2.4	TSS = 14.75 mg/L Dissolved Fraction Available = 87%
1007	Houston Ship Channel/Buffalo Bayou Tidal in Harris County	NA	NA	Copper <sup>1, 3</sup>	1.8	
1008	Panther Branch from the edge of the mixing zone in Lake Woodlands upstream to the permitted outfall in Montgomery County	12597-001	San Jacinto River Authority	Copper <sup>1, 4</sup>	6.45	
1009	Cypress Creek and Harris County Flood Control District Ditch K159-00-00 from the edge of the mixing zone in Cypress Creek upstream to the permitted outfall in Harris County	13296-002	Harris County MUD No. 358	Copper <sup>1, 4</sup>	8.47	
1013	Buffalo Bayou Tidal in Harris County	NA	NA	Copper <sup>1, 3</sup>	1.8	

SEGMENT	SITE DESCRIPTION	TPDES	FACILITY	PARAMETER	SITE-SPECIFIC ADJUSTMENT FACTOR	ADDITIONAL SITE- SPECIFIC CONSIDERATIONS
1014	Horsepen Creek in Harris County	12726-001	Harris Co. MUD No. 155	Copper <sup>1, 4</sup>	4.65	
1014	Willow Fork Drainage Dist. Lateral Ditch VA1 from the edge of the mixing zone in Segment 1014 upstream to the permitted outfall in Fort Bend County	13558-001	Cinco MUD No. 1	Copper <sup>1, 4</sup>	7.26	
1113	Horsepen Bayou in Harris County	10539-001	City of Clear Lake Water Authority	Copper <sup>1, 4</sup>	2.74	
1201	Segment 1201 in Brazoria County	00007-000	Dow Chemical	Copper <sup>1, 4</sup>	1.6	
1209	Unnamed ditch from the edge of the zone of initial dilution of the unnamed ditch in Gibbons Creek Reservoir upstream to the permitted Outfall 001 in Grimes County	02120-000	Texas Municipal Power Agency	Aluminum <sup>1, 4</sup>	6.81	
1236	Ft. Phantom Hill Reservoir in Jones County	01422-000	AEP North Texas	Aluminum <sup>1, 3</sup>	2.9	
1242	Lake Creek Reservoir in McClennan County	00954-000	Luminant Generation Co.	Copper <sup>1, 3</sup>	2.4	

SEGMENT	SITE DESCRIPTION	TPDES	FACILITY	PARAMETER	SITE-SPECIFIC ADJUSTMENT FACTOR	ADDITIONAL SITE- SPECIFIC CONSIDERATIONS
1412	Red Draw Reservoir in Howard County	01768-000	ALON USA	Selenium	Acute Criterion = 219 μg/L Chronic Criterion = 7.5 μg/L	
1701	Victoria Barge Canal in Calhoun County	00447-000	Dow Chemical	Copper <sup>1, 4</sup>	1.81	
1701	Victoria Barge Canal in Victoria County	03943-000	Air Liquide	Copper <sup>1, 4</sup>	2.55	
2427	San Jacinto Bay in Harris County	NA	NA	Copper <sup>1, 3</sup>	1.8	
2431	Moses Bayou from the edge of the mixing zone in Segment 2431 upstream to the drainage ditches receiving the discharge from the permitted outfall in Galveston County	01263-000	ISP Technologies	Copper <sup>1, 4</sup>	1.88	
2453	Saltwater portion of Lynn Bayou below the facility's outfall.	10251-001	City of Port Lavaca	Copper <sup>1, 4</sup>	1.57	
2481	Kinney Bayou tidal/Jewel Fulton Canal from the edge of the mixing zone in Ingleside Cove upstream to the permitted outfall in San Patricio County	10422-001	City of Ingleside	Copper <sup>1, 4</sup>	2.0	

SEGMENT	SITE DESCRIPTION	TPDES	FACILITY	PARAMETER	SITE-SPECIFIC ADJUSTMENT FACTOR	ADDITIONAL SITE- SPECIFIC CONSIDERATIONS
2481	Kinney Bayou tidal/Jewel Fulton Canal from the edge of the mixing zone in Ingleside Cove upstream to the permitted outfall in San Patricio County	10422-001	City of Ingleside	Zinc <sup>1, 4</sup>	1.14	
2485	La Volla Creek from the edge of the mixing zone in Oso Creek upstream to the permitted outfall in Nueces County	10401-003	City of Corpus Christi	Copper <sup>1, 4</sup>	2.07	
2494	Vidia Ancha from the edge of the mixing zone in Segment 2494 upstream to the tidal mud flats receiving the discharge from the permitted outfall in Cameron County	10350-001	Laguna Madre Water District	Copper <sup>1, 4</sup>	2.52	

- Results based on a water-effect ratio study.
- The equation used for acute criterion calculation is  $e^{(1.273(\ln hardness)-0.9744)}$ , and the equation used for chronic criterion calculation is  $e^{(1.273(\ln hardness)-2.958)}$ . 2
- Site-specific criteria apply to the entire water body listed under the "Site Description" column. If the site described is a 3 designated segment, the boundaries of the segment are given in Appendix C of §307.10 of this title.
- Site-specific criteria may only be used in the evaluation of permit limits for the facility listed under the "TPDES" and "Facility" columns.